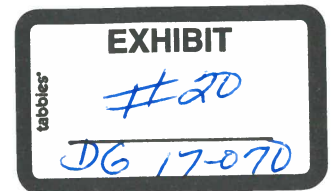


Northern Utilities, Inc.
Docket No. DG 17-070
PUC Staff Information Data Request Set⁴



Received: April 5, 2019
Request No. Staff⁴-4

Date of Response: April 11, 2019
Witness: Todd Diggins

Request:

Ref. Diggins, LeBlanc, Sprague Testimony on 201 Atlantic Ave North Hampton project, page 19. Please provide the detailed cost estimate used to calculate the CIAC for the customer requesting gas service and please calculate what the CIAC would have been if the actual costs had been used.

Response:

Please refer to Staff 1-4 Attachment 1 and Staff 1-4 Attachment 2. The attachment has been updated with actual costs and customer counts.

Unitil - NuNH Gas
Customer Project Evaluation & Determination of Non-Refundable Customer Contribution

[illegible]

Rate Base

Book Depreciation

[illegible]

Tax Depreciation

Tax Depreciation (MACRS) Rates - 20 year			0.0375	0.0722	0.0668	0.0618	0.0571	0.0529	0.0489	0.0452	0.0446	0.0446	0.0446	0.0446	0.0446	0.0446	0.0446	0.0446	0.0446	0.0446	0.0223													
Tax Depr (MACRS)	2018	208,939	7,835	15,083	13,951	12,906	11,937	11,042	10,213	9,448	9,323	9,321	9,323	9,321	9,323	9,321	9,323	9,321	9,323	9,321	4,661													
	2019	33,784		1,267	2,439	2,256	2,087	1,930	1,785	1,651	1,528	1,507	1,507	1,507	1,507	1,507	1,507	1,507	1,507	1,507	1,507	754												
	2020	17,399			652	1,256	1,162	1,075	994	920	850	787	776	776	776	776	776	776	776	776	776	776	388											
	2021	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
	2022	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-											
	2023	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
	2024	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
	2025	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
	2026	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
	2027	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
Total Tax Depreciation		260,121	7,835	16,350	17,042	16,418	15,185	14,047	12,992	12,019	11,701	11,615	11,606	11,604	11,606	11,604	11,606	11,604	11,606	11,604	6,945	1,530	388											

Rate Base

[illegible]

Revenue Build

Primary Class (1)

[illegible]

Additional Class (2)

[illegible]

Additional Class (3)

[illegible]

Income Statement

[illegible]

Interest Expense	6,069	6,760	6,940	6,006	6,285	5,978	5,684	5,401	5,121	4,843	4,565	4,286	4,008	3,730	3,452	3,173	2,895	2,617	2,339	2,060	1,837	1,677	1,530	1,388	1,246	1,104	961	819	677	535	393	251	109	23	5		
Net Income	\$ 2,652	\$ 5,047	\$ 7,050	\$ 7,224	\$ 7,549	\$ 7,866	\$ 8,175	\$ 8,477	\$ 8,777	\$ 9,077	\$ 9,376	\$ 9,676	\$ 9,975	\$ 10,275	\$ 10,574	\$ 10,874	\$ 11,173	\$ 11,472	\$ 11,772	\$ 12,071	\$ 12,338	\$ 12,565	\$ 12,785	\$ 13,002	\$ 13,219	\$ 13,436	\$ 13,653	\$ 13,870	\$ 14,087	\$ 14,304	\$ 14,521	\$ 14,738	\$ 14,955	\$ 17,003	\$ 10,260		
Cash Flows																																					
Revenue - Base	\$ 19,250	\$ 28,309	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839	\$ 32,839			
Prop Tax & Insur	(5,638)	(6,376)	(6,644)	(6,428)	(6,212)	(5,996)	(5,780)	(5,564)	(5,348)	(5,132)	(4,916)	(4,700)	(4,484)	(4,268)	(4,052)	(3,836)	(3,620)	(3,404)	(3,188)	(2,972)	(2,757)	(2,541)	(2,325)	(2,109)	(1,893)	(1,677)	(1,461)	(1,245)	(1,029)	(813)	(597)	(381)	(165)	(36)	(7)		
O&M Incentive Costs	(1,725)	(3,283)	(4,586)	(4,699)	(4,910)	(5,116)	(5,318)	(5,514)	(5,710)	(5,904)	(6,099)	(6,294)	(6,489)	(6,684)	(6,878)	(7,073)	(7,268)	(7,463)	(7,658)	(7,852)	(8,026)	(8,174)	(8,317)	(8,458)	(8,599)	(8,740)	(8,881)	(9,022)	(9,163)	(9,305)	(9,446)	(9,587)	(9,728)	(11,060)	(12,528)		
Inc Tax (Incl Tax Synchron Impact on Interest)	1,840	3,747	3,714	3,364	2,878	2,430	2,014	1,630	1,505	1,471	1,468	1,467	1,468	1,467	1,468	1,467	1,468	1,467	1,468	1,467	(370)	(2,504)	(2,954)	(3,107)	(3,107)	(3,107)	(3,107)	(3,107)	(3,107)	(3,107)	(3,107)	(3,107)	(3,107)	(1,859)	(410)		
Deferred Tax (from tax vs book depr)	(6,069)	(6,760)	(6,940)	(6,006)	(6,285)	(5,978)	(5,684)	(5,401)	(5,121)	(4,843)	(4,565)	(4,286)	(4,008)	(3,730)	(3,452)	(3,173)	(2,895)	(2,617)	(2,339)	(2,060)	(1,837)	(1,677)	(1,530)	(1,388)	(1,246)	(1,104)	(961)	(819)	(677)	(535)	(393)	(251)	(109)	(23)	(5)		
Interest On RateBase	(11,592)	(12,672)	(14,456)	(14,369)	(14,530)	(14,661)	(14,768)	(14,849)	(14,674)	(14,408)	(14,112)	(13,814)	(13,514)	(13,215)	(12,915)	(12,616)	(12,316)	(12,017)	(11,717)	(11,418)	(12,988)	(14,895)	(15,125)	(15,061)	(14,844)	(14,627)	(14,410)	(14,193)	(13,976)	(13,759)	(13,542)	(13,325)	(13,108)	(12,878)	(12,950)		
Expense Components																																					
Oper & Financing Cash Flow (Incl Interest Related)	7,658	15,637	18,383	18,470	18,309	18,178	18,071	17,990	18,165	18,430	18,726	19,025	19,325	19,624	19,924	20,223	20,523	20,822	21,122	21,421	19,851	17,944	17,714	17,778	17,995	18,212	18,429	18,646	18,863	19,080	19,297	19,514	19,731	19,861	19,889		
PreTax Interest (Cash Out) on RateBase	(6,069)	(6,760)	(6,940)	(6,006)	(6,285)	(5,978)	(5,684)	(5,401)	(5,121)	(4,843)	(4,565)	(4,286)	(4,008)	(3,730)	(3,452)	(3,173)	(2,895)	(2,617)	(2,339)	(2,060)	(1,837)	(1,677)	(1,530)	(1,388)	(1,246)	(1,104)	(961)	(819)	(677)	(535)	(393)	(251)	(109)	(23)	(5)		
Interest-Driven Income Tax [Cash In/(Out)]	2,392	2,664	2,735	2,603	2,477	2,356	2,240	2,129	2,018	1,909	1,799	1,689	1,580	1,470	1,360	1,251	1,141	1,031	922	812	724	661	603	547	491	435	379	323	267	211	155	99	43	9	2		
Net CashFlow from Financing	(3,677)	(4,096)	(4,205)	(4,002)	(3,808)	(3,622)	(3,444)	(3,272)	(3,103)	(2,934)	(2,766)	(2,597)	(2,428)	(2,260)	(2,091)	(1,923)	(1,754)	(1,585)	(1,417)	(1,248)	(1,113)	(941)	(755)	(669)	(582)	(496)	(410)	(324)	(238)	(152)	(66)	(14)	(3)				
CashFlow from Operations Only	11,335	19,733	22,588	22,472	22,118	21,800	21,515	21,262	21,268	21,365	21,492	21,622	21,754	21,884	22,015	22,146	22,277	22,407	22,539	22,669	20,963	18,960	18,641	18,619	18,750	18,881	19,011	19,142	19,273	19,404	19,535	19,666	19,796	19,875	19,892		
Investment Cash Flow In/(Out) (From Above)	(208,939)	(33,784)	(17,399)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Net Cash Flow (Excl Financing)	(197,603)	(14,051)	5,189	22,472	22,118	21,800	21,515	21,262	21,268	21,365	21,492	21,622	21,754	21,884	22,015	22,146	22,277	22,407	22,539	22,669	20,963	18,960	18,641	18,619	18,750	18,881	19,011	19,142	19,273	19,404	19,535	19,666	19,796	19,875	19,892		
Cumulative Net Cash Flow (Excl Financing)	(197,603)	(211,654)	(206,465)	(183,993)	(161,875)	(140,076)	(118,561)	(97,298)	(76,031)	(54,666)	(33,174)	(11,552)	10,202	32,086	54,101	76,247	98,524	120,931	143,470	166,139	187,102	206,062	224,703	243,322	262,072	280,952	299,964	319,106	338,379	357,783	377,318	396,983	416,780	436,655	456,547		
Simple Payback	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
IRR on Net Cash Flow (Excl Financing)				-52.06%	-38.10%	-28.32%	-17.00%	-11.78%	-7.81%	-4.96%	-2.85%	-0.82%	0.65%	1.85%	2.84%	3.67%	4.34%	4.95%	5.45%	5.87%	6.21%	6.48%	6.71%	6.92%	7.10%	7.26%	7.40%	7.53%	7.65%	7.75%	7.84%	7.93%	8.00%	8.07%	8.13%		
Net Present Value - at AfTt WACC	6.71%	(185,170)	(197,509)	(193,239)	(175,911)	(159,929)	(145,168)	(131,516)	(118,874)	(107,024)	(95,869)	(85,354)	(75,441)	(66,094)	(57,284)	(48,978)	(41,149)	(33,768)	(26,812)	(20,255)	(14,076)	(8,720)	(4,182)	(0)	3,914	7,807	11,092	14,381	17,484	20,411	23,173	25,778	28,236	30,555	32,738	34,782	
Net Cash Flows (Excl Financing) over Dynamic 10-year period																																					
Incremental Cap Ex	422,952	33,784	17,399	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
RelativeYear of Cap Ex	2	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Last Relative year of Analysis	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
IRR	0.65%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.65%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
NPV	(66,094)	-	-	-	-	-	-	-	-	-	-	-	-	(66,094)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Net Cash Flows (Excl Financing) over Dynamic 20-year period																																					
Incremental Cap Ex	422,952	33,784	17,399	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
RelativeYear of Cap Ex	2	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Last Relative year of Analysis	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22			
IRR	6.71%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
NPV	(0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Net Cash Flows (Excl Financing) for Dual Fuel Customer																																					
Number of Contract Years	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
IRR	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			
NPV	(185,170)	(185,170)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			